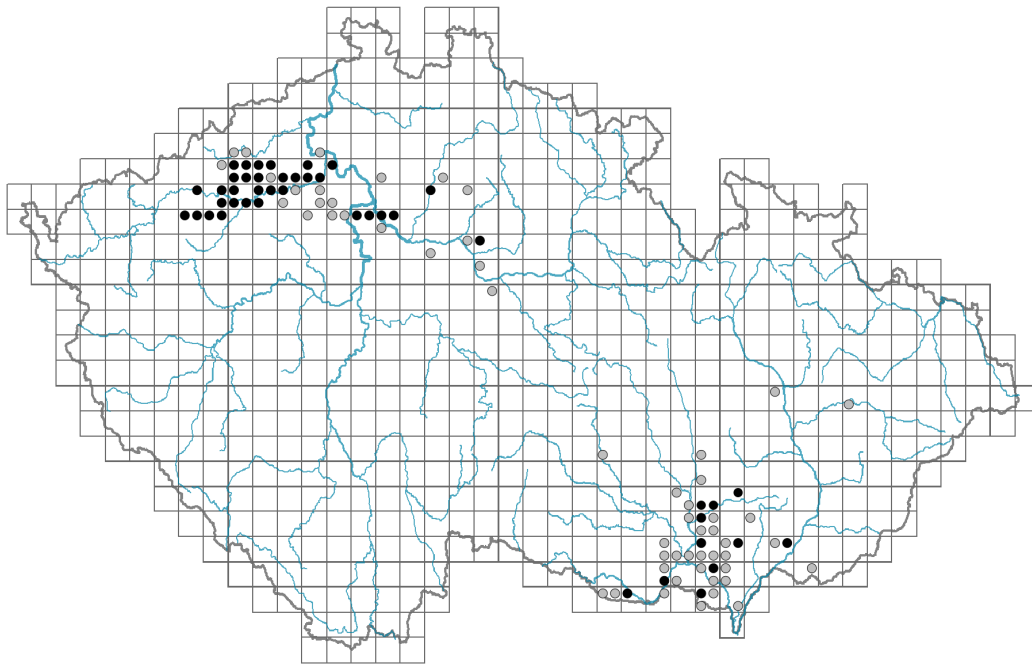


# Melilotus dentatus

## Distribution



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### Map info

● revised records

● unrevised records

On the map are not visualized records without the coordinates and records marked as incorrect or doubtful.



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## Habitus and growth type

Height [m]: **0.3**

Growth form: **annual herb**

Life form: **hemicryptophyte**

Life strategy: **CS - competitor/stress-tolerator**

## Leaf

Leaf presence and metamorphosis: **leaves present, not modified**

Leaf arrangement (phyllotaxis): **alternate**

Leaf shape: **compound - ternate**

Stipules: **present**

Petiole: **present**

Leaf life span: **summer green**

Leaf anatomy: **mesomorphic**

## Flower

Flowering period [month]: **June-September**

Flowering phase: **8 Clematis vitalba-Galium sylvaticum (mid-summer)**

Flower colour: **yellow**

Flower symmetry: **zygomorphic**

Perianth type: **calyx and corolla**



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© Miroslav Pida

Perianth fusion: **free**  
Calyx fusion: **synsepalous**  
Inflorescence type: **racemus**  
Dicliny: **synoecious**  
Pollination syndrome: **insect-pollination**

### Fruit, seed and dispersal

Fruit type: **dry fruit - legume**  
Fruit colour: **brown, grey, black**  
Reproduction type: **only by seed/spores**  
Dispersal unit (diaspore): **seed, fruit, infrutescence or its part**  
Dispersal strategy: **Allium (mainly autochory)**  
Myrmecochory: **non-myrmecochorous (b) nv**

### Belowground organs and clonality

Root metamorphosis: **primary storage root**  
Storage organ: **primary storage root**  
Shoot life span (cyclicality): **monocyclic shoots prevailing**  
Primary root: **present**

#### Bud bank

Number of buds per shoot at the soil surface (root buds excluded): **4**  
Number of buds per shoot at a depth of 0–10 cm (root buds excluded): **3**  
Number of buds per shoot at a depth greater than 10 cm (root buds excluded):  
Size of the belowground bud bank (root buds excluded): **6**  
Depth of the belowground bud bank (root buds excluded) [cm]: **3**  
Number of buds per shoot at the soil surface (root buds included): **4**  
Number of buds per shoot at a depth of 0–10 cm (root buds included): **3**  
Number of buds per shoot at a depth greater than 10 cm (root buds included):  
Size of the belowground bud bank (root buds included): **6**  
Depth of the belowground bud bank (root buds included) [cm]: **3**

### Trophic mode

Parasitism and mycoheterotrophy: **autotrophic**  
Carnivory: **non-carnivorous**  
Symbiotic nitrogen fixation: **symbiosis with rhizobia**

### Karyology

Chromosome number (2n): **16**  
Ploidy level (x): **2**  
2C genome size [Mbp]: **2232.6**  
1Cx monoploid genome size [Mbp]: **1116.3**  
Genomic GC content: **38.9 %**



## Taxon origin

Origin in the Czech Republic: **native**

## Ecological indicator values

Ellenberg-type indicator values

Light indicator value: **8 - light plant, only exceptionally occurring at less than 40% of diffuse radiation incident in an open area**

Temperature indicator value: **6 - transition between values 5 and 7**

Moisture indicator value: **7 - humidity indicator, focus on well moistened, but not wet soils**

Reaction indicator value: **8 - transition between values 7 and 9, occurring mostly in calcium-rich conditions**

Nutrient indicator value: **6 - transition between values 5 and 7**

Salinity indicator value: **5 -  $\alpha$ -mesohaline, mostly on soils with a moderate salt content**

Indicator values for disturbance

Whole-community disturbance frequency indicator value: **-0.21**

Herb layer disturbance frequency indicator value: **-0.21**

Whole-community disturbance severity indicator value: **0.28**

Herb layer disturbance severity indicator value: **0.32**

Whole-community structure based disturbance indicator value: **0.63**

Herb layer structure-based disturbance indicator value: **0.7**

## Habitat and sociology

Occurrence in habitats

4 Wetland and riverine herbaceous vegetation

4B Halophilous reed and sedge beds: **2 - optimum**

4G Tall-sedge beds: **1 - rare occurrence**

4I Vegetation of nitrophilous annual hygrophilous herbs: **1 - rare occurrence**

6 Meadows and mesic pastures

6C Pastures and park grasslands: **1 - rare occurrence**

6D Alluvial meadows of lowland rivers: **1 - rare occurrence**

6G Vegetation of wet disturbed soils: **2 - optimum**

10 Saline vegetation

10I Inland saline meadows: **2 - optimum**

10J Saline steppes: **1 - rare occurrence**

13 Anthropogenic vegetation

13A Annual vegetation of ruderal habitats: **1 - rare occurrence**

13C Annual vegetation of trampled habitats: **1 - rare occurrence**

13D Perennial thermophilous ruderal vegetation: **1 - rare occurrence**

Affinity to the forest environment

Affinity to the forest environment in Thermophyticum: **0 - taxon that does not spontaneously occur in Czech forests**

Affinity to the forest environment in Mesophyticum and Oreophyticum: **0 - taxon that does not spontaneously occur in Czech forests**

## Diagnostic taxon

Diagnostic taxon of classes: [TC Festuco-Puccinellietea](#)

Diagnostic taxon of alliances: [MCB Meliloto dentati-Bolboschoenion maritimi](#), [TCA Puccinellion limosae](#), [TCB Juncion gerardii](#)

Diagnostic taxon of associations: [MCB01 Astero pannonici-Bolboschoenetum compacti](#), [TCA01 Puccinellietum limosae](#), [TCB01 Scorzonero parviflorae-Juncetum gerardii](#), [TCB02 Loto tenuis-Potentilletum anserinae](#), [TCB03 Agrostio stoloniferae-Juncetum ranarii](#)

## Constant taxon

Constant taxon of classes: [TC Festuco-Puccinellietea](#)

Constant taxon of alliances: [TCB Juncion gerardii](#)

Constant taxon of associations: [MBB04 Chenopodio chenopodioidis-Atriplicetum prostratae](#), [MCB01 Astero pannonici-Bolboschoenetum compacti](#), [TCB01 Scorzonero parviflorae-Juncetum gerardii](#), [TCB02 Loto tenuis-Potentilletum anserinae](#), [TCB03 Agrostio stoloniferae-Juncetum ranarii](#)

## Ecological specialization indices

Ecological specialization index for all vegetation types: **5.3**

Ecological specialization index for non-forest vegetation: **5.3**

## Colonization ability

Index of colonization success (ICS): **1**

Index of colonization potential (ICP): **1**

## Distribution and frequency

Floristic zone: **northern temperate, southern temperate, submeridional, meridional**

Floristic region: **Europe, Western Asia**

Continental degree: **8**

Distribution range extension along the continentality gradient: **6**

Elevational belt in the Czech Republic: **lowlands, colline belt**

Occurrence frequency in the basic grid mapping cells and quadrants of the basic grid mapping cells: **56**

taxon.data.freq\_in\_quad: **99**

## Commonness in vegetation plots from the Czech Republic

Occurrence frequency in vegetation plots: **0.2 %**

Occurrence frequency in vegetation plots with a cover above 5%: **14.8 %**

Occurrence frequency in vegetation plots with a cover above 25%: **1.6 %**

Occurrence frequency in vegetation plots with a cover above 50%: **0 %**

Mean percentage cover in vegetation plots: **4.5 %**

Maximum percentage cover in vegetation plots: **38 %**

## Number of habitats with taxon occurrence in the Czech Republic

Number of narrow habitats in which the taxon occurs: **11**

Number of narrow habitats in which the taxon has its optimum: **3**

Number of broad habitats in which the taxon occurs: **4**

Number of broad habitats in which the taxon has its optimum: **3**

## **Threats and protection**

Red List 2017 (national categories): **C2t - endangered taxon, declining**

Red List 2017 (IUCN categories): **EN - endangered**

Legal protection: **not protected by law**